



1011 PAWTUCKET BLVD.
P.O. BOX 3295
LOWELL, MA 01854-3295
(508) 442-5000

August 22, 1996

RECEIVED

AUG 22 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

By Hand

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

DOCKET FILE COPY ORIGINAL

Re: Local Multipoint Distribution Service
CC Docket No. 92-297

Dear Mr. Caton:

On behalf of M/A-COM, Inc., enclosed please find an original and four (4) copies of Reply Comments filed in response to the Fourth Notice of Proposed Rulemaking and Comments to the Fourth Notice of Proposed Rulemaking in the above referenced proceeding.

Please direct any questions regarding this matter to the undersigned.

Sincerely,

Roy J. Hebert
Manager, LMDS Business Development

Enclosures

RECEIVED

AUG 22 1996

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Federal Communications Commission
Office of Secretary

In the Matter of)
)
Rulemaking to Amend Parts 1, 2, 21)
and 25 of the Commission's Rules to)
Redesignate the 27.5-29.5 GHz.)
Frequency Band, to Reallocate to)
29.5-30.0 GHz. Frequency Band, to)
Establish Rules and Policies for Local)
Multipoint Distribution Service and for)
Fixed Satellite Services)
)

CC Docket No. 92-297

REPLY COMMENTS OF M/A-COM, Inc.

M/A-COM, Inc.
an AMP Company
1011 Pawtucket Blvd.
Lowell, Ma. 01854
(508) 442-4607
(508) 442-5442 (Fax)

August 22, 1996

1. INTRODUCTION

M/A-COM is a wholly owned subsidiary of AMP, Inc. AMP, headquartered in Harrisburg PA, is the world leader in connector products and connection solutions. M/A-COM is Amp's Global Wireless Products Group, with a charter to provide products for the wireless telecommunications industry. Today, M/A-COM remains as one of the largest RF, Microwave and Millimeterwave Device and Component manufacturers in the world.

M/A-COM has been a pioneer in the development of customer premise equipment (CPE) hardware for LMDS. Interested LMDS participants have worked with M/A-COM assessing millimeterwave (28 GHz.) equipment viability, since 1990. CellularVision Technology and Telecommunications, L.P. (CT&T) in particular, has worked closely with M/A-COM in the development and deployment of millimeterwave technology. The opportunity to use technology at millimeterwave frequencies was once the primary domain for expensive, low volume Military applications. The FCC's vision and continued commitment from Industry has changed that. Although M/A-COM's LMDS hardware has been well established, with over 20,000 units shipped, the hardware optimization and full capabilities are yet to be realized.

From M/A-COM's point of view as an LMDS equipment supplier, three areas remain critical to take full advantage of this unprecedented opportunity: Sufficient Bandwidth, Single Block Licensee and Time to Market. M/A-COM respectfully submits Reply Comments to both the Fourth NPRM and the Comments to the Fourth NPRM on these issues: Allocation of 300 MHz. in the 31 GHz. Band for LMDS, Proposed Licensing of 1.3 GHz. Blocks and Potential Delays to Auctions in 1996.

2. Allocation of 300 MHz. in the 31 GHz. Band for LMDS

In view of the encumbrance on the two-way use of the 150 MHz. from 29.1-29.25, the FCC is correct that additional spectrum is necessary for LMDS. It is quite inefficient from an equipment design and performance point of view to limit the upstream path to the 850 MHz. at 28 GHz., exclusively. To truly optimize a competitive solution, M/A-COM agrees with the FCC and the commentors from the LMDS, Satellite and Wireless cable industry that have universally supported the need for this additional spectrum. M/A-COM acknowledges the FCC's comments regarding the benefits of this non-contiguous spectrum on the CPE hardware.

The FCC's Frequency Band plan for LMDS at 28/29 GHz. and 31 GHz., although not ideal, offers a satisfactory solution. With the certainty of a 31 GHz. spectrum allocation for LMDS, M/A-COM would devote Research and Development resources to developing commercially viable hardware to be used in connection with the 28 GHz. LMDS systems.

3. Proposed Licensing of a 1.3 GHz. Block

M/A-COM strongly supports the FCC's proposal to assign the 28 GHz. and 31 GHz. spectrum as a single 1.3 GHz. block. A single block licensee would be afforded optimum deployment considerations to compete with the Telephone and Cable companies. Maintaining the ability to deploy application specific equipment to meet a wide variety of Service offerings in each BTA, is critical to the success of LMDS.

Further encumbrances of splitting the spectrum for multiple licensees, lessens the value of spectrum and could compromise the technical and economical viability.

4. Potential Delays to Auctions in 1996

M/A-COM applauds the FCC's efforts to launch LMDS. The LMDS industry has been flexible and supportive of the process since the First NPRM, released in January 1993. In addition to the FCC's insight into providing adequate and un-encumbered spectrum, providing timely competition to the Telephone and Cable industry, is equally critical.

M/A-COM agrees with the comments to the Fourth NPRM, that in no way should further discussions preclude auctions of, at a minimum, the 1 GHz. spectrum at 28 GHz. in 1996.

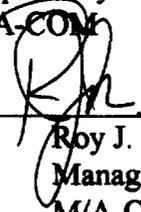
5. Conclusion

The FCC has done a commendable job in facilitating a paradigm shift in the world of Telecommunications, called LMDS. From M/A-COM's point of view as an LMDS equipment supplier, three areas remain critical to take full advantage of this unprecedented opportunity: Sufficient Bandwidth, Single Block Licensee and Time to Market.

With auctions of 1.3 GHz. licenses this year, the Commission's vision of LMDS will be realized, and LMDS will emerge as a new provider of competitive consumer choices in interactive Video, Telephony and Data services throughout the United States.

Respectfully submitted,

M/A-COM

By: 

Roy J. Hebert
Manager, LMDS Business Development
M/A-COM, an AMP Company
1011 Pawtucket Blvd.
Lowell, MA. 01853

Certificate of Service

I, Roy J. Hebert, certify that copies of the foregoing "Reply Comments of M/A-COM, Inc." were delivered by hand, on August 22, 1996, to the following:

Hon. Reed E. Hundt
Chairman
Federal Communications Commission
1919 M Street, NW, Room 814
Washington, DC 20554

Hon. James H. Quello
Commissioner
Federal Communications Commission
1919 M Street, NW, Room 802
Washington, DC 20554

Hon. Susan Ness
Commissioner
Federal Communications Commission
1919 M Street, NW, Room 832
Washington, DC 20554

Hon. Rachelle B. Chong
Commissioner
Federal Communications Commission
1919 M Street, NW, Room 844
Washington, DC 20554

Blair Levin
Chief of Staff
Office of Chairman Reed Hundt
Federal Communications Commission
1919 M Street, NW, Room 814
Washington, DC 20554

Jackie Chorney
Legal Advisor to Chairman Hundt
Federal Communications Commission
1919 M Street, NW, Room 814
Washington, DC 20554

Lauren J. Belvin
Senior Advisor to Commissioner Quello
Federal Communications Commission
1919 M Street, NW, Room 802
Washington, DC, 20554

Rudolfo M. Baca
Legal Advisor to Commissioner Quello
Federal Communications Commission
1919 M Street, NW, Room 802
Washington, DC 20554

James L. Casserly
Senior Advisor to Commissioner Ness
Federal Communications Commission
1919 M Street, NW, Room 832
Washington, DC 20554

David R. Siddall
Legal Advisor to Commissioner Ness
Federal Communications Commission
1919 M Street, NW, Room 832
Washington, DC 20554

Jane Mago
Senior Legal Advisor to Commissioner Chong
Federal Communications Commission
1919 M Street, NW, Room 844
Washington, DC 20554

Suzanne Toller
Legal Advisor to Commissioner Chong
Federal Communications Commission
1919 M Street, NW, Room 844
Washington, DC 20554

Dr. Robert M. Pepper
Chief, Office of Plans & Policy
Federal Communications Commission
1919 M Street, NW, Room 822
Washington, DC 20554

Michele C. Farquhar
Chief, Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, NW, Room 5002
Washington, DC 20554

Jennifer Warren
Associate Bureau Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, NW, 5002
Washington, DC 20554

Rosalind K. Allen
Deputy Bureau Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, NW, Room 5002
Washington, DC 20554

David P. Wye
Technology Advisor
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, NW, Room 5002
Washington, DC 20554

Robert James
Assistant for Microwave Services
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, NW, Room 8010
Washington, DC 20554

Susan E. Magnotti
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, NW, Room 8010
Washington, DC 20554



Roy J. Hebert